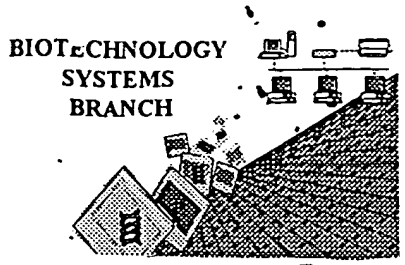

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/071,449
Source: OIPE
Date Processed by STIC: 2/27/2002

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FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
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PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

Input Set : A:\EP.txt
Output Set: N:\CRF3\02272002\J071499.raw

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

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C--> 4 <141> CURRENT FILING DATE: 2002-02-08
4 <150> PRIOR APPLICATION NUMBER: US 60/267,509<151> 2001-02-08<160> 16 <170> PatentIn

major formatting error. Contact Bob Wax at 703-306-4119 or 703-308-4216

ERRORED SEQUENCES

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27 Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val
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40     130                 135                 140
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44 145                 150                 155                 160
47 Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
48                 165                 170                 175
51 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
52             180                 185                 190
55 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
56         195                 200                 205
59 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
60     210                 215                 220
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PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

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     72             260                 265                 270
     75 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
     76         275                 280                 285
     79 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
     80     290                 295                 300
     83 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
     84 305                 310                 315                 320
     87 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
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    108 gcatgtactt ggagacaaaa cactaaatct tcaagaatag aagccattaa gatacaaatc    180
    110 ctcagtaaac ttcgtctgga aacagctcct aacatcagca aagatgttat aagacaactt    240
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    132 tgctgtcgtt accctctaac tgtggatttt gaagctttg gatgggattg gattatcgct    900
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PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

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154         35                  40                  45
157 Phe Val Phe Leu Gln Lys Tyr Pro His Thr His Leu Val His Gln Ala
158     50                  55                  60
161 Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
162 65                  70                  75                  80
165 Pro Ile Asn Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly
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178 aattactgct ctggagagtg tgaatttgta tttttacaaa aatatcctca tactcatctg    180
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194             20                  25                  30
197 Ile Lys Ile Gln Ile Leu Ser Lys Leu Arg Leu Glu Thr Ala Pro Asn
198         35                  40                  45
201 Ile Ser Lys Asp Val Ile Arg Gln Leu Leu Pro Lys Ala Pro Pro Leu
202     50                  55                  60
205 Arg Glu Leu Ile Asp Gln Tyr Asp Val Gln Arg Asp Asp Ser Ser Asp
206 65                  70                  75                  80
209 Gly Ser Leu Glu Asp Asp Asp Tyr His Ala Thr Thr Glu Thr Ile Ile
210                 85                  90                  95
213 Thr Met Pro Thr Glu Ser Asp Phe Leu Met Gln Val Asp Gly Lys Pro
214             100                 105                 110
217 Lys Cys Cys Phe Phe Lys Phe Ser Ser Lys Ile Gln Tyr Asn Lys Val
218         115                 120                 125
221 Val Lys Ala Gln Leu Trp Ile Tyr Leu Arg Pro Val Glu Thr Pro Thr
222     130                 135                 140
225 Thr Val Phe Val Gln Ile Leu Arg Leu Ile Lys Pro Met Lys Asp Gly
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PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

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229 Thr Arg Tyr Thr Gly Ile Arg Ser Leu Lys Leu Asp Met Asn Pro Gly
230                 165                 170                 175
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234             180                 185                 190
237 Leu Lys Gln Pro Glu Ser Asn Leu Gly Ile Glu Ile Lys Ala Leu Asp
238         195                 200                 205
241 Glu Asn Gly His Asp Leu Ala Val Thr Phe Pro Gly Pro Gly Glu Asp
242     210                 215                 220
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258 cttcgtctgg aaacagctcc taacatcagc aaagatgtta taagacaact tttacccaaa    180
260 gctcctccac tccgggaact gattgatcag tatgatgtcc agagggatga cagcagcgat    240
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264 gagtctgatt ttctaatgca agtggatgga aaacccaaat gttgcttctt taaatttagc    360
266 tctaaaatac aatacaataa agtagtaaag gcccaactat ggatatattt gagacccgtc    420
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270 acaaggtata ctggaatccg atctctgaaa cttgacatga acccaggcac tggtatttgg    540
272 cagagcattg atgtgaagac agtgttgcaa aattggctca aacaacctga atccaactta    600
274 ggcattgaaa taaaagcttt agatgagaat ggtcatgatc ttgctgtaac cttcccagga    660
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288             20                  25                  30
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292         35                  40                  45
295 Ser Arg Pro Ala Pro Ser Val Ala Pro Glu Pro Asp Gly Cys Pro Val
296     50                  55                  60
299 Cys Val Trp Arg Gln His Ser Arg Glu Leu Arg Leu Glu Ser Ile Lys
300 65                  70                  75                  80
303 Ser Gln Ile Leu Ser Lys Leu Arg Leu Lys Glu Ala Pro Asn Ile Ser
304                 85                  90                  95
307 Arg Glu Val Val Lys Gln Leu Leu Pro Lys Ala Pro Pro Leu Gln Gln
308             100                 105                 110
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315 Phe Leu Glu Glu Asp Glu Tyr His Ala Thr Thr Glu Thr Val Ile Ser
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319 Met Ala Gln Glu Thr Asp Pro Ala Val Gln Thr Asp Gly Ser Pro Leu
320 145                 150                 155                 160
323 Cys Cys His Phe His Phe Ser Pro Lys Val Met Phe Thr Lys Val Leu
324                 165                 170                 175
327 Lys Ala Gln Leu Trp Val Tyr Leu Arg Pro Val Pro Arg Pro Ala Thr
328             180                 185                 190
331 Val Tyr Leu Gln Ile Leu Arg Leu Lys Pro Leu Thr Gly Glu Gly Thr
332         195                 200                 205
335 Ala Gly Gly Gly Gly Gly Gly Arg Arg His Ile Arg Ile Arg Ser Leu
336     210                 215                 220
339 Lys Ile Glu Leu His Ser Arg Ser Gly His Trp Gln Ser Ile Asp Phe
340 225                 230                 235                 240
343 Lys Gln Val Leu His Ser Trp Phe Arg Gln Pro Gln Ser Asn Trp Gly
344                 245                 250                 255
347 Ile Glu Ile Asn Ala Phe Asp Pro Ser Gly Thr Asp Leu Ala Val Thr
348             260                 265                 270
351 Ser Leu Gly Pro Gly Ala Glu Gly Leu His Pro Phe Met Glu Leu Arg
352         275                 280                 285
355 Val Leu Glu Asn Thr Lys Arg Ser Arg Arg Asn Leu Gly Leu Asp Cys
356     290                 295                 300
359 Asp Glu His Ser Ser Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
360 305                 310                 315                 320
363 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
364                 325                 330                 335
367 Lys Ala Asn Tyr Cys Ser Gly Gln Cys Glu Tyr Met Phe Met Gln Lys
368             340                 345                 350
371 Tyr Pro His Thr His Leu Val Gln Gln Ala Asn Pro Arg Gly Ser Ala
372         355                 360                 365
375 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
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     446     50                  55                  60
     449 Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
     450 65                  70                  75                  80
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     510     130                 135                 140
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     530     210                 215                 220
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E--> 550 <400> SEQUENCE:
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     552 ggggagcgct ccagccggcc agccccgtcc gtggcgcccg agccggacgg ctgccccgtg    120
     554 tgcgtttggc ggcagcacag ccgcgagctg cgcctagaga gcatcaagtc gcagatcttg    180
     556 agcaaactgc ggctcaagga ggcgcccaac atcagccgcg aggtggtgaa gcagctgctg    240
     558 cccaaggcgc cgccgctgca gcagatcctg gacctacacg acttccaggg cgacgcgctg    300
     560 cagcccgagg acttcctgga ggaggacgag taccacgcca ccaccgagac cgtcattagc    360
     562 atggcccagg agacggaccc agcagtacag acagatggca gccctctctg ctgccatttt    420
     564 cacttcagcc ccaaggtgat gttcacaaag gtactgaagg cccagctgtg ggtgtaccta    480
```

RAW SEQUENCE LISTING DATE: 02/27/2002
PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

Input Set : A:\EP.txt
Output Set: N:\CRF3\02272002\J071499.raw

```
     566 cggcctgtac cccgcccagc cacagtctac ctgcagatct tgcgactaaa acccctaact    540
     568 ggggaaggga ccgcaggggg agggggcgga ggccggcgtc acatccgtat ccgctcactg    600
     570 aagattgagc tgcactcacg ctcaggccat tggcagagca tcgacttcaa gcaagtgcta    660
     572 cacagctggt tccgccagcc acagagcaac tggggcatcg agatcaacgc ctttgatccc    720
     574 agtggcacag acctggctgt cacctccctg gggccgggag ccgaggggct gcatccattc    780
     576 atggagcttc gagtcctaga gaacacaaaa cgttcccggc gg                       822
     579 <210> SEQ ID NO: 13<211> 23<212> PRT<213> Homo sapiens<400> 13
W--> 581 <211> LENGTH:
W--> 581 <212> TYPE:
W--> 581 <213> ORGANISM:
E--> 581 <400> SEQUENCE:
     581 Met Gln Lys Leu Gln Leu Cys Val Tyr Ile Tyr Leu Phe Met Leu Ile
     582 1               5                   10                  15
     585 Val Ala Gly Pro Val Asp Leu
     586             20
     589 <210> SEQ ID NO: 14<211> 24<212> PRT<213> Homo sapiens<400> 14
W--> 591 <211> LENGTH:
W--> 591 <212> TYPE:
W--> 591 <213> ORGANISM:
E--> 591 <400> SEQUENCE:
     591 Met Val Leu Ala Ala Pro Leu Leu Leu Gly Phe Leu Leu Leu Ala Leu
     592 1               5                   10                  15
     595 Glu Leu Arg Pro Arg Gly Glu Ala
     596             20
     599 <210> SEQ ID NO: 15<211> 232<212> PRT<213> Homo sapiens<400> 15
W--> 601 <211> LENGTH:
W--> 601 <212> TYPE:
W--> 601 <213> ORGANISM:
E--> 601 <400> SEQUENCE:
     601 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
     602 1               5                   10                  15
     605 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
     606             20                  25                  30
     609 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
     610         35                  40                  45
     613 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
     614     50                  55                  60
     617 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
     618 65                  70                  75                  80
     621 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
     622                 85                  90                  95
     625 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
     626             100                 105                 110
     629 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
     630         115                 120                 125
     633 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
     634     130                 135                 140
     637 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
     638 145                 150                 155                 160
```

RAW SEQUENCE LISTING DATE: 02/27/2002
PATENT APPLICATION: US/10/071,499 TIME: 14:24:21

Input Set : A:\EP.txt
Output Set: N:\CRF3\02272002\J071499.raw

```
     641 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
     642                 165                 170                 175
     645 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
     646             180                 185                 190
     649 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
     650         195                 200                 205
     653 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
     654     210                 215                 220
     657 Ser Leu Ser Leu Ser Pro Gly Lys
     658 225                 230
     661 <210> SEQ ID NO: 16<211> 227<212> PRT<213> Homo sapiens<400> 16
W--> 663 <211> LENGTH:
W--> 663 <212> TYPE:
W--> 663 <213> ORGANISM:
E--> 663 <400> SEQUENCE:
     663 Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Leu Gly
     664 1               5                   10                  15
     667 Ala Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
     668             20                  25                  30
     671 Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
     672         35                  40                  45
     675 Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
     676     50                  55                  60
     679 His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
     680 65                  70                  75                  80
     683 Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
     684                 85                  90                  95
     687 Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
     688             100                 105                 110
     691 Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
     692         115                 120                 125
     695 Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
     696     130                 135                 140
     699 Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
     700 145                 150                 155                 160
     703 Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
     704                 165                 170                 175
     707 Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
     708             180                 185                 190
     711 Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
     712         195                 200                 205
     715 His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
     716     210                 215                 220
     719 Pro Gly Lys
     720 225
```

VERIFICATION SUMMARY DATE: 02/27/2002
PATENT APPLICATION: US/10/071,499 TIME: 14:24:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\02272002\J071499.raw

L:2 M:283 W: Missing Blank Line separator, <120> field identifier
L:3 M:283 W: Missing Blank Line separator, <130> field identifier
L:4 M:270 C: Current Application Number differs, Replaced Current Application No
L:4 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:5 M:283 W: Missing Blank Line separator, <210> field identifier
L:7 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:7 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:7 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:7 M:200 E: Mandatory Header Field missing, <400> is required.
L:104 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:104 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:104 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:104 M:200 E: Mandatory Header Field missing, <400> is required.
L:145 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:145 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:145 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:145 M:200 E: Mandatory Header Field missing, <400> is required.
L:174 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:174 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:174 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:174 M:200 E: Mandatory Header Field missing, <400> is required.
L:189 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:189 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:189 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:189 M:200 E: Mandatory Header Field missing, <400> is required.
L:254 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:254 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:254 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:254 M:200 E: Mandatory Header Field missing, <400> is required.
L:283 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:283 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:283 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:283 M:200 E: Mandatory Header Field missing, <400> is required.
L:388 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:388 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:388 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:388 M:200 E: Mandatory Header Field missing, <400> is required.
L:433 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:433 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:433 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:433 M:200 E: Mandatory Header Field missing, <400> is required.
L:462 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:462 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:462 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:462 M:200 E: Mandatory Header Field missing, <400> is required.
L:477 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:477 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:477 M:282 W: Numeric Field Identifier Missing, <213> is required.

VERIFICATION SUMMARY DATE: 02/27/2002
PATENT APPLICATION: US/10/071,499 TIME: 14:24:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\02272002\J071499.raw

L:477 M:200 E: Mandatory Header Field missing, <400> is required.
L:550 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:550 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:550 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:550 M:200 E: Mandatory Header Field missing, <400> is required.
L:581 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:581 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:581 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:581 M:200 E: Mandatory Header Field missing, <400> is required.
L:591 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:591 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:591 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:591 M:200 E: Mandatory Header Field missing, <400> is required.
L:601 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:601 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:601 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:601 M:200 E: Mandatory Header Field missing, <400> is required.
L:663 M:282 W: Numeric Field Identifier Missing, <211> is required.
L:663 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:663 M:282 W: Numeric Field Identifier Missing, <213> is required.
L:663 M:200 E: Mandatory Header Field missing, <400> is required.